

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A piezoelectric generator ~~that creates a potential when physically distorted, said generator~~ comprising:

a first piezoelectric layer;

a second piezoelectric layer;

~~at least one~~ a guide-tooth; and

a guide-frame for said first and second piezoelectric layers ~~layer~~, wherein said first and second piezoelectric ~~layer~~ layers ~~is~~ are located between said ~~at least one~~ guide-tooth and said guide-frame, said guide-frame is operable to receive said ~~at least one~~ guide-tooth such that at least a portion of said guide-tooth is operable to fit into said guide-frame, ~~and~~ said first and second piezoelectric layers ~~are layer~~ ~~is~~ distorted into said guide-frame by said guide-tooth when said guide-frame receives said guide-tooth, wherein said first and second piezoelectric layers do not vertically overlap between said guide-tooth and guide-frame.

2. (currently amended) A flexible array of piezoelectric generators, said array comprising:

a first layer having a plurality of flexible first piezoelectric generators, wherein each one of said first piezoelectric generators include at least one piezoelectric element, ~~said plurality of~~ at least two of said first piezoelectric generators are physically

separated by at least an isolation layer, ~~said plurality of generators have a first stiffness, and~~ said isolation layer has a ~~second~~ stiffness greater than the stiffnesses of at least one of said first piezoelectric generators; and ~~and~~ ~~said isolation layer is flexible, and said second stiffness is greater than said first stiffness~~

a second layer, coupled to said first layer, having a plurality of flexible second piezoelectric generators, wherein one of said plurality of said flexible second piezoelectric generators is aligned with said isolation layer.

3. (currently amended) A flexible array of piezoelectric generators, said array comprising:

a first layer having a plurality of flexible first piezoelectric generators, wherein each one of said first piezoelectric generators include at least one piezoelectric element, said at least two of said first piezoelectric ~~plurality of~~ generators are separated by an isolation layer, ~~said plurality of generators have a first stiffness, and~~ said isolation layer has a second stiffness, ~~said isolation layer is flexible, and said second stiffness is smaller than said first~~ the stiffness of at least one of said first piezoelectric generators; and

a second layer, coupled to said first layer, having a plurality of flexible second generators, wherein one of said plurality of said flexible second generators is aligned with said isolation layer.

4. (currently amended) The flexible array of claim 2, wherein said flexible array is electrically coupled to an electrical energy storage device to store

electrical energy generated by said plurality of flexible first piezoelectric generators.

5. (previously presented) The flexible array of claim 2, wherein at least one of said at least one piezoelectric elements is located between a first flexible metal layer and a second flexible metal layer.

6. (currently amended) The flexible array of claim 3, wherein said flexible array is electrically coupled to an electrical energy storage device to store electrical energy generated by said plurality of flexible first piezoelectric generators.

7. (previously presented) The flexible array of claim 3, wherein at least one of said at least one piezoelectric elements is located between a first flexible metal layer and a second flexible metal layer.

8. (cancelled).

9. (currently amended) The system of claim 1, further comprising:

a first metal layer provided between at least a portion of said first piezoelectric layer and at least a portion of said guide-tooth; and

a second metal layer provided between at least a portion of said first piezoelectric layer and at least a portion of said guide-frame.

10. (currently amended) The system of claim 1, further comprising ~~a battery~~ an electrical energy storage

device, coupled to said first piezoelectric layer, for receiving and storing electrical energy provided by said first piezoelectric layer.

11. (currently amended) The system of claim 1, further comprising a spring located between said guide-tooth and guide-frame and coupled to said first piezoelectric layer, wherein said spring is operable of providing force against said first piezoelectric layer.

12. (previously presented) A piezoelectric generator that creates a potential when physically distorted, said generator comprising:  
a piezoelectric layer;  
a spring coupled to said piezoelectric layer; and  
a guide-frame for receiving said piezoelectric layer, wherein said spring is coupled to said guide-frame, said guide-frame is operable to receive said piezoelectric layer such that at least a portion of said piezoelectric layer is operable to fit into said guide frame, and wherein said piezoelectric layer is distorted into said guide-frame when said guide-frame receives said piezoelectric layer.

13. (previously presented) The generator of claim 12, wherein said spring is operable to physically distort said piezoelectric layer.

14. (previously presented) The generator of claim 12, wherein said spring comprises a cushion having a spring constant operable to physically distort said piezoelectric layer.

15. (currently amended) The generator of claim 12, wherein an energy storage device is coupled to said piezoelectric layer to ~~generate~~ store electrical energy ~~produced~~ provided by said piezoelectric layer.

16. (currently amended) A system comprising:  
a plurality of piezoelectric generators, wherein each one of said piezoelectric generators comprise a piezoelectric layer;

a first layer having a plurality of guide-teeth, wherein at least one of said guide-teeth is aligned with at least one ~~one~~ of said plurality of piezoelectric generators and a force applied to one of said guide-teeth is distributed amongst other portions of said first layer having other guide-teeth; and

a second layer having a plurality of guide-teeth receivable frames, wherein said plurality of piezoelectric generators are located between said first layer and said second layer, wherein each one of ~~said each one of said~~ guide-teeth receivable frames is operable to receive at least a part of at least one of said guide-teeth ~~such that at least a part of said at least one guide-teeth fits into said guide-teeth frames~~, and wherein ~~at least one of~~ each one of said piezoelectric generators are distorted into at least one of said guide-teeth frames by at least one of said guide-teeth when said guide-teeth frames receive ~~receives~~ said guide-teeth.†

17. (cancelled)

18. (currently amended) The generator of claim 16, wherein at least one energy storage device is coupled

to said plurality of piezoelectric layers to store electrical energy generated by said plurality of piezoelectric layers.

19. (currently amended) The generator of claim 16, further comprising a material having a spring constant coupled to at least one of said piezoelectric layers and located between said first and second layers ~~located in at least one of said guide-teeth receivable frames,~~ wherein said material having a spring constant is operable of providing force against at least one of said at least one piezoelectric layers that is coupled to said material.

20. (cancelled)

21. (new) The generator of claim 12, wherein said spring extends said piezoelectric layer away from said guide-frame when no force is exerted against said spring towards said guide-frame and said spring is condensed into said guide frame when said piezoelectric layer is forced into said guide frame.

22. (new) The generator of claim 12, further comprising a guide-tooth, wherein said guide-tooth is aligned with said guide-frame is operable to distort said piezoelectric layer into said guide-frame.

23. (new) The generator of claim 12, further comprising:

a first metal layer coupled to one side of said piezoelectric layer;

a second metal layer coupled to another side of said piezoelectric layer; and

an electrical energy storage device coupled to said first and second metal layers.

24. (new) The generator of claim 16, wherein at least one electrical energy storage device is coupled to a first and second metal layer, said first metal layer being coupled to one side of, and said second metal layer being coupled to another side of, at least one of said plurality of piezoelectric layers.